Troubleshooting Guide

Condition	*Possible Cause*
Instrument Inoperative	Instrument not plugged into electrical outlet Power switch not in “on” position Blown fuse Loose connection to power switch Faulty power switch Faulty DC power supply
No Microwave Power	Instrument door ajar Incorrect percentage of power selected Interlock(s) not properly adjusted or faulty Faulty controller board Faulty thermal switch Faulty high voltage component
Low Microwave Power	Low line voltage Incorrect wattage parameter Incorrect voltage switch setting Incorrect percentage of power selected Faulty high voltage relay(s) Faulty high voltage component
Fuse Blows When Door is Opened	Interlock(s) not properly adjusted Faulty interlock(s)
Fuse Blows Repeatedly During Operation	Low line voltage Faulty high voltage component Faulty DC power supply Faulty controller board Faulty continuous power supply
Inoperative Turntable	Loose or broken turntable belt Faulty turntable motor Faulty controller board
Turntable Not Alternating	Loose or faulty turntable belt Faulty turntable sensor Faulty turntable motor Faulty controller board
No Display	Loose or broken wiring connections Loose or faulty interface cable Faulty display Faulty controller board
Inoperative Keyboard	Loose or faulty interface cable Faulty keyboard Faulty controller board
Inoperative Vessel Stirring Motor	Loose or broken stirring motor belt Faulty Stirring Motor

Condition	*Possible Cause*
Erratic Pressure* (ESP-1500)	Incorrect A/D setting Leakage from vessel Loose vent fitting Improper installation into vessel support module Loose bulkhead connector Improper grounding connection Faulty ESP-1500 Faulty controller board
Erratic Pressure (External Water Line)	Leakage from vessel Loose vent fitting Loose connection on pressure relief valve Faulty pressure relief valve Loose connection on 2-way valve Faulty 2-way valve Faulty pressure transducer electrical connector Faulty pressure transducer
Erratic Temperature (EST-300)	Incorrect A/D setting Corroded connector on EST-300 or ESP-1500 Loose bulkhead connector Faulty EST-300 Faulty ESP-1500 Faulty controller board
Erratic Temperature (Fiber Optic Probe)	Broken thermowell Faulty fiber optic probe Faulty fiber optic controller board
Arcing from EST-300	Overtightened or cracked locking nut Residue in tip of or on thermowell Burned or discolored tube in center of ESP-1500
Microwave Leakage	Improperly adjusted instrument door Damaged instrument door
Inoperative Cavity Light	Faulty light bulb Loose connection(s) Faulty connection(s) Faulty controller board
Tangled Pressure Sensing Line	Control vessel not positioned properly in turntable Turntable not alternating

*Slightly erratic pressure is normal if controlling pressure below 50 psi.

Condition	*Possible Cause*
Vapors in Laboratory	Loose drain valve Leakage from vessel Ruptured membrane Vent hose to fume hood not installed Faulty blower assembly
No Rise in Pressure in Control Vessel	Leakage at vent fitting Rupture membrane not installed Thermowell loose in vessel ESP-1500 unattached or faulty Sample does not absorb microwave energy Liquid does not generage pressure upon heating Covers not properly flared to ensure tightness in vessel
No Rise in Temperature in Control Vessel	Sample not microwave absorbing Temperature probe inserted incorrectly Temperature probe connected incorrectly
Ruptured Optional Vessel Membrane	Excessive amount of reactive organic sample Leakage from control vessel resulting in abnormal pressure buildup in other vessels Closed microwave transparent valve
Venting Relief Valve	Excessive amount of reactive organic compounds Closed microwave transparent valve Two-way valve in incorrect position
Loose Pressure Sensing Tube in Control Vessel	Tubing not fully inserted and sealed into mating fitting with ferrule nut Closed microwave transparent valve